IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A method of designing a validation environment for a service implemented by an embedded electrical system, the method including:

[[a)]] assigning to said service one or more user requests and system responses of the electrical system thereto;

[[b)]] assigning to said service a behavioral automata, said behavioral automata fixing [[the]] allowed sequencing of said user requests and said system responses;

[[c)]] automatically generating ~~automatically~~ a skeleton validation environment for said service, in the form of a program executable on a simulation tool, said skeleton validation environment including ~~comprising~~ a testing automata produced from a traversal of said behavioral automata, a model of initial conditions, models of user requests, models of system response accuracy, an environmental model and [[the]] dataflow and control flow which ~~assembling~~ assemble these models together, and said skeleton validation environment covering all user requests and resultant system responses of said service;[[,]] and

[[d)]] recording said skeleton validation environment in a computer readable memory device for use by a design validation tool.

Claim 2 (Currently Amended): A method according to claim 1, including assigning to each user request a function implementing [[it]] each user request and assigning to each system response one or more functions implementing each user request [[it]], a dataflow of said skeleton validation environment being built using said functions of user request and system response.

Claim 3 (Currently Amended): A method according to claim 2, including assigning to said service a black box interface, whose input and output correspond to the input and output of at least one of the functions implementing the service, and interfacing the output of said service black box with [[said]] a skeleton input and [[said]] a skeleton output with the input of said service black box and completing and correcting skeleton and service specification in a simulation environment to yield a validation result.

Claim 4 (Currently Amended): A method according to claim 3, including outputting a validated model which includes the ~~comprises a~~ validation environment for said service and ~~at the same time comprises~~ a validated model of the service.

Claim 5 (Previously Presented): A method according to claim 1, including substituting a model of the service with its software implementation.

Claim 6 (Previously Presented): A method according to claim 1, including substituting a model of the service with its software and hardware implementation and embedding said validation environment on a testing platform interfaced with said hardware implementation.

Claim 7 (Previously Presented): A method according to claim 1, including a systematic injection of faults for all replicated objects in a fault tolerant system, such as a brake-by-wire system in a vehicle.

Claim 8 (Currently Amended): A method according to claim 1, including assigning a validation environment for several services sharing at least one user request and mixing said

validation environments of said service implemented by an embedded electrical system to yield a validation environment for ~~the set of~~ said several services.

Claim 9 (Canceled).

Claim 10 (Currently Amended): A computer readable storage medium including ~~program product comprising~~ program code ~~means~~ stored thereon ~~on a computer readable medium~~ for performing the method of claim 1 when said program code ~~product~~ is run on a computer including a processor.

Claim 11 (Canceled).